ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. #0000519
STP00-0000-00(519)
GDOT District 4 - Tifton
Worth County
SR 133 GRIP; FM North of Colquitt County Line
TO North of SR 112

OFFICE Design Policy & Support

DATE May 23, 2011

FROM for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT **APPROVED CONCEPT REPORT**

Attached is the approved Concept Report for the above subject project.

Attachment

DISTRIBUTION:

Genetha Rice-Singleton, Program Control Administrator
Bobby Hilliard, State Program Delivery Engineer
Cindy VanDyke, State Transportation Planning Administrator
Angela Robinson, Financial Management Administrator
Glenn Bowman, State Environmental Administrator
Ben Rabun, State Bridge Engineer
Kathy Zahul, State Traffic Engineer
Georgene Geary, State Materials & Research Engineer
Ron Wishon, State Project Review Engineer
Jeff Baker, State Utilities Engineer
Ken Thompson, Statewide Location Bureau Chief
Michael Henry, Systems & Classification Branch Chief
Joe Sheffield, District Engineer
Brent Thomas, District Preconstruction Engineer
Tim Warren, District Utilities Engineer
Douglas Fadool, Project Manager
BOARD MEMBER - 8th Congressional District

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

REVISED PROJECT CONCEPT REPORT

Project Number: STP00-0000-00(519)
County: Worth
P.I. Number: 0000519
Federal Route Number: N/A
State Route Number: 133

The features from the approved concept report being revised are the width of the depressed median, the width of the pavement of the outside shoulder and the length of the storage areas for left turn lanes.

Submitted for approval:

DATE 2-24-11 — J.B. Trimble, Inc.

DATE 2/28/11 — Office Head (Project Manager's Office)

DATE 2/28/11 — Project Manager

Recommendation for approval:

DATE 3/15/2011 — Glenn Bowman *
State Environmental Administrator

DATE 4/26/2011 — Ben Rabun *
State Bridge Design Engineer (if applicable)

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Program (RTP) and/or the State Transportation Improvement Program (STIP).

DATE 3/30/2011 — Cindy VanDyke *
State Transportation Planning Administrator

* Recommendation on file. KKF

Need and Purpose

State Route 133 is a major north-south corridor in South Georgia and provides a vital connection between Valdosta on the south with Albany to the north. The proposed project would improve a 6.57 mile stretch from 2,000 feet north of the Colquitt/Worth County line at Worth County Mile Post 0.46 to 1,500 feet north of SR 112 at Worth County Mile Post 7.03.

This corridor is part of the Governor's Road Improvement Program (GRIP) with adjacent projects programmed between Valdosta and Albany. This program aims to connect 95% of Georgia's cities with a population of 2,500 or more to the Interstate System, ensuring that 98% of all areas of the state are within 20 miles of a four-lane road.

Traffic

The AADT for this roadway is predicted to be 4,560 in the year 2017 and 5,570 in the design year of 2037. This translates to a level of service A for the design year.

Crashes

Within this 6.57 mile project study corridor section, SR 133 is classified as a Minor Arterial, NHS, Rural roadway. A total of 27 crashes occurred within this project study corridor section during the three year analysis period (2007-2009). The most common type of crash was departure crashes (13) where vehicles left the SR 133 roadway. All of these crashes were single vehicle crashes that did not involve another vehicle. Six of these departure crashes occurred at night during dark conditions. The second most common type of crash was right angle crashes (9). In most of the right angle crashes, the side street vehicles were entering onto or crossing SR 133.

In terms of severity, 14 of the 27 crashes were injury crashes (52%) and two were fatal crashes (7%). These severe crashes resulted in a total of 27 injuries and two fatalities. Table 1 presents a summary of the crash rates calculated for each year (2007, 2008, and 2009) including the three-year average and compared against the statewide average crash rates for similar facilities.

Table 1 – Crash Rate Comparison Summary

Year	Type	Project Study Corridor Section		Statewide Average Crash Rate*
		Number of Crashes	Crash Rate*	
2007	Crashes	6	57	149
	Injuries	4	38	67
	Fatalities	1	**9.41**	1.60
2008	Crashes	10	94	152
	Injuries	5	47	75
	Fatalities	0	0.00	1.85
2009	Crashes	11	104	142
	Injuries	5	47	74
	Fatalities	1	**9.41**	1.75

2007-2009 Overall Average	Crashes	27	85	148
	Injuries	14	44	72
	Fatalities	2	**6.28**	1.73

*Indicates the crash rate shown is per 100 million vehicle miles (MVM).
Note: The project crash rates shown in bold represent values that exceeded the statewide average crash rate.

As shown in Table 1, the project's 2007-2009 overall average crash rates for crash and injury types were below the statewide average crash rates. However, the project's 2007-2009 overall average fatality crash rate was above the statewide average crash rate. In addition, both the fatality crash rate in 2007 and 2009 exceeded the statewide average crash rate.

Description of the approved concept: Project No. STP00-0000-00(519) had proposed to widen and reconstruct the existing two-lane (24-ft) roadway to two 12-ft lanes in each direction with 10-ft outside shoulders and 6-ft inside shoulders, from 2,300 feet north of the Colquitt/Worth County line at Worth County Mile Post 0.5 to SR 112 at Worth County Mile Post 6.6. The mainline would have a proposed design speed of 65 mph.

In order to match the alignment of this project to Project No. STP00-0000-00(520) to the south, the project would widen to the east, adding two northbound lanes while maintaining the existing alignment to the west creating two southbound lanes. Immediately north of "The Cole House", through the addition of new southbound lanes, the alignment would cross over to widen to the west. Approximately 1,000 feet north of Causey Road at Worth County Mile Post 5.0, SR 133 would be located on new alignment to the north. The alignment would then return to the existing corridor, constructing new northbound lanes and retaining the existing lanes for southbound traffic.

In addition to its mandated improvement as a GRIP route, the project would improve the anticipated capacity deficiencies on SR 133 by improving the LOS for the design year (2030). Improving SR 133 to a multi-lane facility with separate turning lanes will reduce turning conflicts from the through traffic and improve operations.

PDP Classification: Major __X___ Minor _____

Federal Oversight: Full Oversight ( ), Exempt (X), State Funded ( ), or Other ( )

Functional Classification: Rural Minor Arterial

US Route Number(s): N/A **State Route Number(s):** 133

Traffic (AADT) as shown in the approved concept:
Base Year: (2010) 9,782 Design Year: (2030) 10,483

Updated traffic data (AADT):
Base Year: (2017) 4,560 Design Year: (2037) 5,570

Approved Programmed/Schedule:
P.E.: 2003 R/W: 2014 Construction: 2019

VE Study Required: Yes (X) No ( )
Note: A VE Study was held in January 2010 and implemented in July 2010.

Benefit/Cost Ratio: N/A

Is the project located in an Ozone Non-attainment area? Yes ( ) No (X)

Is the project located in a PM2.5 Non-attainment area? Yes ( ) No (X)

Approved Features:	**Proposed Features:**
A Value Engineering Study held in January 2010 and implemented in July 2010 recommended the roadway median typical section be revised to a 32-ft depressed median to minimize right-of-way and environmental impacts and reduce construction and right-of-way acquisition costs. The Study also recommended reducing storage lengths of left turn lanes to minimum allowable lengths and reducing the paved shoulder from 6.5-ft to 4-ft to reduce construction costs.	The 44-ft depressed median was reduced to a 32-ft depressed median. The outside paved shoulder was reduced from 6.5-ft to 4-ft. The storage lengths for left turn lanes were reduced to minimum allowable lengths. ** Note: A 32-ft depressed median is proposed in lieu of the standard GRIP 44-ft depressed median to minimize environmental impacts and displacements. Therefore, a design variance would be required for the median.
Reason for Change: The reductions in median width, paved shoulder width and left turn storage length were due to the implementation of VE recommendations.	

Potential Environmental Impacts of Proposed Revision: Environmental impacts were minimized by reducing the typical section footprint. The roadway median was reduced from a 44-ft depressed median to a 32-ft depressed median.

Have proposed revisions been reviewed by environmental staff? Yes (X) No ( )

Environmental Responsibilities: Consultant, GDOT

Updated cost estimates: See attached.

Table 2 – Cost Estimate Summary

STP00-0000-00(519)	
Base Construction Cost:	**$16,231,850**
Engineering and Inspection @ 5%:	$811,593
Fuel Adjustment:	$1,787,712
Liquid AC Adjustment:	$2,966,382
Total Construction Cost:	**$21,797,537**
Right of Way:	$6,054,000
Reimbursable Utilities:	$521,024
Mitigation Costs:	$448,373
Grand Total Project Cost:	**$28,820,934**

Recommendation: It is recommended that the proposed revision to the concept report be approved for implementation.

Attachments:

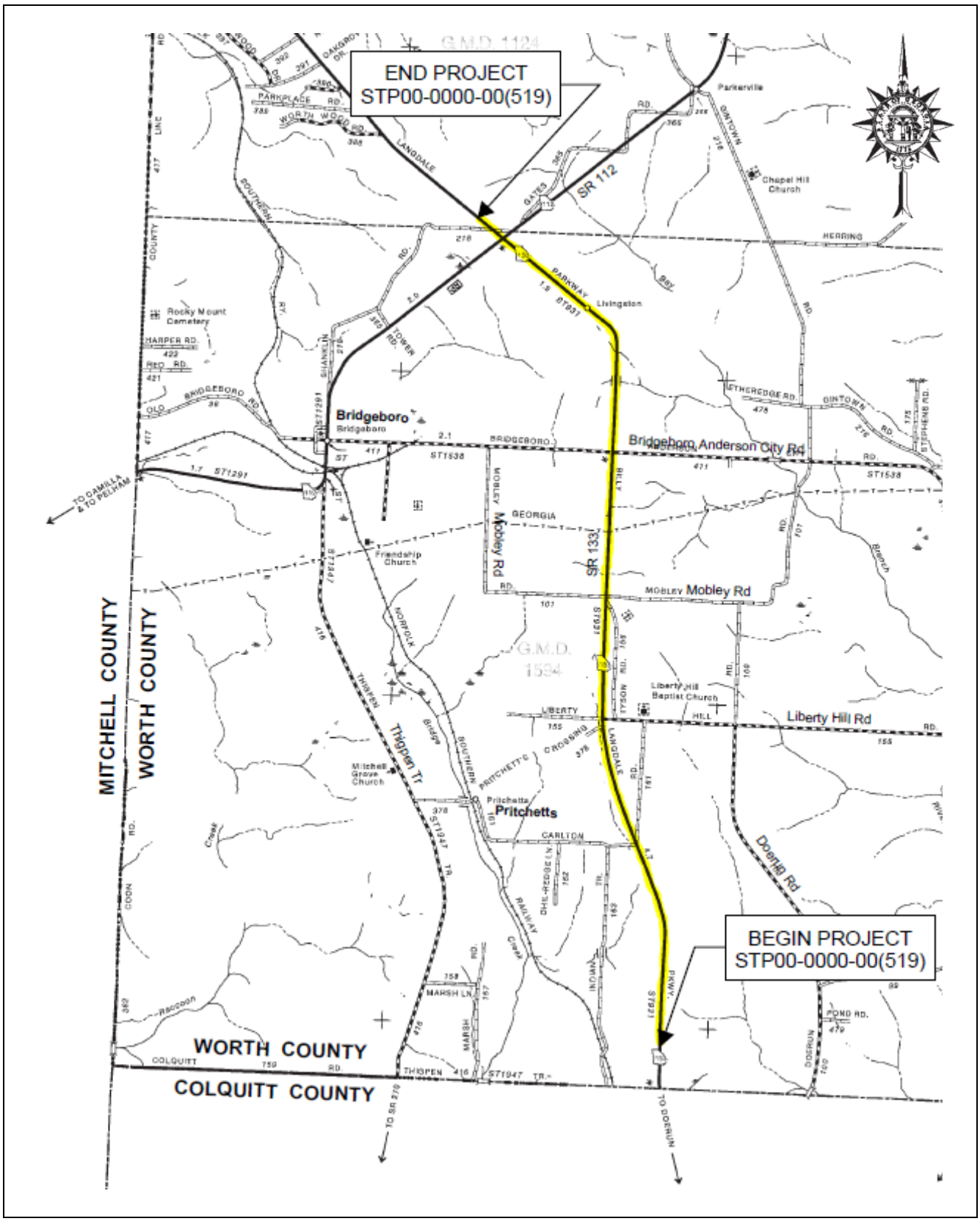
1. Location Map
2. Cost Estimate
3. Utility Cost Estimate
4. Preliminary Right of Way Cost Estimate
5. Fuel Adjustment
6. Environmental Mitigation Cost Estimate
7. Typical Sections
8. Value Engineering Implementation Letter
9. Approved Traffic Data

Concur: _____
Director of Engineering

Approve: _____ 05/20/11
Chief Engineer Date

ATTACHMENT 1
LOCATION MAP

LOCATION MAP



Project: STP00-0000-00(519) **P.I. No.:** 0000519
Description: Widening of SR 133 from 2,000 feet north of the Colquitt/Worth County line to 1,500 feet north of SR 112 in Worth County

ATTACHMENT 2
COST ESTIMATE

COST ESTIMATE SUMMARY

STP00-0000-00(519)	
Base Construction Cost:	**$16,231,850**
Engineering and Inspection @ 5%:	$811,593
Fuel Adjustment:	$1,787,712
Liquid AC Adjustment:	$2,966,382
Total Construction Cost:	**$21,797,537**
Right of Way:	$6,054,000
Reimbursable Utilities:	$521,024
Mitigation Costs:	$448,373
Grand Total Project Cost:	**$28,820,934**

Project No. STP00-0000-00(519)
P.I. No. 000519
Description: SR 133 From North of Colquitt County Line to North of SR 112

CONSTRUCTION COST ESTIMATE
CONCEPTUAL

Item No.	ITEMS:	Unit	Total Qty	Price	Cost
	ROADWAY ITEMS				
310-1101	GR AGGR BASE CRS, INCL MATL	TN	170000	$15.56	$2,645,200
318-3000	AGGR SURF CRS	TN	750	$17.42	$13,065
402-3121	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM	TN	47000	$54.85	$2,577,950
402-3130	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM	TN	27000	$59.62	$1,609,740
402-3190	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM	TN	35000	$54.05	$1,891,750
413-1000	BITUM TACK COAT	GL	36000	$1.91	$68,760
441-3999	CONCRETE V GUTTER	LF	19800	$20.35	$402,930
			Sub-Total		**$9,209,395**
	EARTHWORK				
205-0001	UNCLASS EXCAV	CY	136033	$4.54	$617,590
206-0002	BORROW EXCAV, INCL MATL	CY	158145	$4.42	$699,001
			Sub-Total		**$1,316,591**
	DRAINAGE ITEMS				
500-3101	CLASS A CONCRETE	CY	882.06	$704.67	$621,561
511-1000	BAR REINF STEEL	LB	99584	$0.76	$75,684
550-1180	STORM DRAIN PIPE, 18 IN, H 1-10	LF	6768	$31.34	$212,109
550-1240	STORM DRAIN PIPE, 24 IN, H 1-10	LF	919	$40.22	$36,962
550-1300	STORM DRAIN PIPE, 30 IN, H 1-10	LF	1304	$53.76	$70,103
550-1360	STORM DRAIN PIPE, 36 IN, H 1-10	LF	1745	$62.43	$108,940
550-1420	STORM DRAIN PIPE, 42 IN, H 1-10	LF	596	$80.80	$48,157
550-1480	STORM DRAIN PIPE, 48 IN, H 1-10	LF	236	$76.92	$18,153
550-2180	SIDE DRAIN PIPE, 18 IN, H 1-10	LF	2100	$23.96	$50,316
550-2240	SIDE DRAIN PIPE, 24 IN, H 1-10	LF	360	$38.93	$14,015
550-3318	SAFETY END SECTION 18 IN, STORM DRAIN, 4:1 SLOPE	EA	109	$695.93	$75,856
550-3324	SAFETY END SECTION 24 IN, STORM DRAIN, 4:1 SLOPE	EA	5	$927.47	$4,637
550-3330	SAFETY END SECTION 30 IN, STORM DRAIN, 4:1 SLOPE	EA	8	$1,375.15	$11,001
550-3336	SAFETY END SECTION 36 IN, STORM DRAIN, 4:1 SLOPE	EA	13	$1,888.42	$24,549
550-4118	FLARED END SECTION 18 IN, SIDE DRAIN	EA	138	$458.63	$63,291
550-4124	FLARED END SECTION 24 IN, SIDE DRAIN	EA	24	$520.97	$12,503
550-4218	FLARED END SECTION 18 IN, STORM DRAIN	EA	7	$536.18	$3,753
550-4224	FLARED END SECTION 24 IN, STORM DRAIN	EA	15	$679.18	$10,188
550-4230	FLARED END SECTION 30 IN, STORM DRAIN	EA	6	$932.97	$5,598
550-4236	FLARED END SECTION 36 IN, STORM DRAIN	EA	27	$1,021.63	$27,584
550-4242	FLARED END SECTION 42 IN, STORM DRAIN	EA	14	$1,513.03	$21,182
668-2100	DROP INLET, GP 1	EA	128	$2,524.35	$323,117
			Sub-Total		**$1,839,261**
	TEMPORARY EROSION CONTROL				
163-0232	TEMPORARY GRASSING	AC	44	$443.12	$19,497
163-0240	MULCH	TN	1900	$147.33	$279,927
163-0300	CONSTRUCTION EXIT	EA	15	$1,649.59	$24,744
163-0503	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	EA	112	$557.51	$62,441
163-0520	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	LF	3000	$13.20	$39,600
163-0521	CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS	EA	50	$193.05	$9,653
163-0523	CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS - TYPE C SILT FENCE	EA	650	$165.96	$107,874
163-0530	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	LF	1800	$3.98	$7,164
163-0531	CONSTRUCT AND REMOVE SEDIMENT BASIN, TP 1, STA NO -	EA	6	$8,263.21	$49,579
163-0550	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	EA	128	$136.05	$17,414
165-0010	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	LF	15000	$0.47	$7,050
165-0030	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	LF	1600	$1.03	$1,648
165-0040	MAINTENANCE OF EROSION CONTROL CHECKDAMS/DITCH CHECKS	EA	350	$57.86	$20,251
165-0060	MAINTENANCE OF TEMPORARY SEDIMENT BASIN, STA NO -	EA	6	$1,537.49	$9,225
165-0070	MAINTENANCE OF BALED STRAW EROSION CHECK	LF	900	$1.41	$1,269
165-0087	MAINTENANCE OF SILT CONTROL GATE, TP 3	EA	112	$112.04	$12,548
165-0101	MAINTENANCE OF CONSTRUCTION EXIT	EA	15	$588.38	$8,826
165-0105	MAINTENANCE OF INLET SEDIMENT TRAP	EA	128	$86.45	$11,066
167-1000	WATER QUALITY MONITORING AND SAMPLING	EA	10	$815.46	$8,155
167-1500	WATER QUALITY INSPECTIONS	MO	30	$844.68	$25,340
171-0010	TEMPORARY SILT FENCE, TYPE A	LF	30000	$1.34	$40,200
171-0030	TEMPORARY SILT FENCE, TYPE C	LF	3200	$3.20	$10,240
			Sub-Total		**$773,711**

CONSTRUCTION COST ESTIMATE
CONCEPTUAL

Item No.	ITEMS:	Unit	Total Qty	Price	Cost
	PERMANENT EROSION CONTROL				
603-2181	STN DUMPED RIP RAP, TP 3, 18 IN	SY	1200	$39.24	$47,088
603-2024	STN DUMPED RIP RAP, TP 1, 24 IN	SY	800	$42.99	$34,392
603-7000	PLASTIC FILTER FABRIC	SY	2000	$4.20	$8,400
700-6910	PERMANENT GRASSING	AC	88	$971.98	$85,534
700-7000	AGRICULTURAL LIME	TN	175	$79.99	$13,998
700-7010	LIQUID LIME	GL	220	$20.19	$4,442
700-8000	FERTILIZER MIXED GRADE	TN	118	$517.84	$61,105
700-8100	FERTILIZER NITROGEN CONTENT	LB	4400	$1.62	$7,128
710-9000	PERMANENT SOIL REINFORCING MAT	SY	4000	$3.79	$15,160
716-2000	EROSION CONTROL MATS, SLOPES	SY	15000	$0.90	$13,500
			Sub-Total		**$290,747**
	SIGNING & MARKING				
636-1020	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	SF	444	$14.23	$6,318
636-1033	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9	SF	676	$17.69	$11,958
636-2070	GALV STEEL POSTS, TP 7	LF	1677	$7.41	$12,427
636-5100	MILEPOST SIGNS	EA	13	$133.91	$1,741
653-0120	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	EA	38	$65.81	$2,501
653-0170	THERMOPLASTIC PVMT MARKING, ARROW, TP 7	EA	28	$78.84	$2,208
653-1704	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	LF	225	$3.45	$776
653-2501	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	LM	17	$1,479.92	$25,159
653-2502	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	LM	16	$1,291.48	$20,664
653-4501	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	GL	13	$1,029.73	$13,386
653-4502	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, YELLOW	GL	2	$792.83	$1,586
653-6004	THERMOPLASTIC TRAF STRIPING, WHITE	SY	15880	$2.59	$41,129
653-6006	THERMOPLASTIC TRAF STRIPING, YELLOW	SY	426	$3.02	$1,287
654-1001	RAISED PVMT MARKERS TP 1	EA	521	$3.73	$1,943
654-1003	RAISED PVMT MARKERS TP 3	EA	2398	$3.45	$8,273
			Sub-Total		**$151,355**
	MISCELLANEOUS ITEMS				
150-1000	TRAFFIC CONTROL -	LS	1	$500,000.00	$500,000
153-1300	FIELD ENGINEERS OFFICE TP 3	EA	1	$68,980.10	$68,980
201-1500	CLEARING & GRUBBING -	LS	1	$2,000,000.00	$2,000,000
620-0100	TEMPORARY BARRIER, METHOD NO. 1	LF	1000	$32.29	$32,290
632-0003	CHANGEABLE MESSAGE SIGN, PORTABLE, TYPE 3	EA	2	$9,346.46	$18,693
634-1200	RIGHT OF WAY MARKERS	EA	335	$92.02	$30,827
			Sub-Total		**$2,650,790**

CONSTRUCTION SUBTOTAL = **$16,231,850**

ATTACHMENT 3
UTILITY COST ESTIMATE

MACTEC

engineering and constructing a better tomorrow

December 20, 2010

Mr. Tim Warren
District Utilities Engineer
Georgia Department of Transportation
710 West 2nd St
Tifton, GA 31793-7510

Subject: **Master Contract No. TOOOUUTL100621**
Completed - Preliminary Utility Cost Estimates- S.R. 133 Albany to Moultrie
STP-0000-00 (520) P.I. # 0000520, Colquitt/Worth Counties
STP-0000-00 (475) P.I. # 0000475, Dougherty County
STP-0000-00 (473) P.I. # 0000473, Dougherty County
STP-0000-00 (519) P.I. # 0000519, Worth County
Task Order No. 1, Job Order No. 4

Dear Mr. Warren:

MACTEC Engineering and Consulting Inc. (MACTEC) is please to submit our findings for the Reimbursable and Non-Reimbursable Utility Estimates as per your request on the above referenced projects.

The scope of services consists of MACTEC securing Reimbursable and Non-Reimbursable estimates of utility facilities owned by private or public Entities on SR 133from Albany to Moultrie.

STP-0000-00 (520) P.I. # 0000520, Colquitt/Worth Counties

FACILLITY OWNER	REIMBURSABLE	NON-REIMBURSABLE
AT&T	$ 0.00	$ 30,600.00
City of Doerun	90,000.00	160,363.70
City of Moultrie	16,500.00	0.00
Colquitt E.M.C.	0.00	752,925.27
MEAG	598,749.00	0.00
Georgia Power (Dis.)	210,000.00	0.00
Mediacom C. C .	0.00	29,790.00
Windstream Comm.	110,000.00	210,800.00
Sub Total	**$1,025,249.00**	**$1,204.478.97**

Total $2,229,727.97

Private Irrigation Xing around Mile Post 29.75 should be addressed in the right of way acquisition.

MACTEC Engineering and Consulting, Inc.
3200 Town Point Drive NW, Suite 100 • Kennesaw, GA 30144 • Phone: 770.421.3400 • Fax: 770.421.3486
www.mactec.com

STP-0000-00 (475) P.I. # 0000475, Dougherty County

FACILLITY OWNER	REIMBURSABLE	NON-REIMBURSABLE
AT&T	$ 0.00	$ 340,000.00
MCI/Verizon Business	0.00	92,500.00
Mitchell E.M.C.	469,411.37	905,146.20
Mediacom C.C.	0.00	26,318.00
Sub Total	**$469,411.37**	**$1,363,964.20**

Total **$1,833,375.57**

STP-0000-00 (473) P.I. # 0000473, Dougherty County

FACILLITY OWNER	REIMBURSABLE	NON-REIMBURSABLE
AT&T	$ 0.00	$ 513,000.00
Albany Water, Gas & Power	0.00	58,450.00
Dixie Pipeline	273,000.00	0.00
Mitchell E.M.C.	2,111,382.00	673,714.46
Southern Natural Gas Co.	524,260.00	0.00
Mediacom C.C.	0.00	20,000.00
Sub Totals	**$2,908,642.00**	**$1,265,164.46**

Total **$4,173,806.46**

STP-0000-00 (519) P.I. # 0000519, Worth County

FACILLITY OWNER	REIMBURSABLE	NON-REIMBURSABLE
AT&T	$ 0.00	$225,000.00
Mitchell E.M.C.	521,023.70	250,863.27
Colquitt E.M.C.	0.00	198,250.20
Sub Totals	**$521,023.70**	**$674,113.47**

Total **$1,195,137.17**

Should you need additional information, please contact Donnie Murphy at 770-421-70239 or 678-776-9701.

Sincerely,

MACTEC Engineering and Consulting, Inc.

Donnie Murphy
Utility Coordination Manager

Charles Law
Senior Principle Engineer

ATTACHMENT 4
PRELIMINARY RIGHT OF WAY COST ESTIMATE

Department of Transportation

State of Georgia

Interdepartmental Correspondence

FILE R/W Cost Estimate **OFFICE** Atlanta

DATE January 19, 2011

FROM Phil Copeland, Right of Way Administrator
LaShone Alexander, Right of Way Cost Estimator

TO Douglas Fadool, AVS, Project Manager

SUBJECT **Preliminary Right of Way Cost Estimate**
Project: STP-0000-00(519) Dougherty/Worth County
P.I. No.: 000519
Description: SR 133 Widening, Moultrie to Albany

As per your request, attached is a copy of the approved Preliminary Right of Way Cost Estimates on the above referenced projects.

If you have any questions, please contact LaShone Alexander at One Georgia Center 600 West Parkway Street, NW Atlanta, GA 30308, Right of Way Office at (478) 553-1569 or (478) 232-4045.

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PC: LA
Attachments
c: File

Preliminary Right of Way Cost Estimate

Phil Copeland
Right of Way Administrator
By: LaShone Alexander

Date: January 6, 2011
Project: STP-0000-00(519)Worth
Existing/Required R/W: Varies/Varies
Project Termini: SR 133 from just North of Doerun to just North of SR 112
Project Description: SR 133 Widening, Moultrie to Albany

P.I. Number: 000519
No. Parcels: 89

Land:	Rural Residential		
	37 acres @ $15,000/acre	$ 555,000	
	Agricultural		
	57 acres @ $3,000/acre	171,000	
			$ 726,000
Improvements:	residences, double wide mobile home, Blk. Store Bldg., frame barns & hog barn		1,250,000
Relocation:	Commerical (2)		50,000
	Residential (4)		160,000
Damage:	Proximity		
	Consequential		
	Cost to Cure		255,000
	Net Cost		$ 2,441,000

Net Cost		$ 2,441,000
Scheduling Contingency	55%	1,342,550
Adm/Court Cost	60%	2,270,130
		$ 6,053,680

Total Cost $6,054,000

Note: This estimate is based on estimate by consultant dated January 6, 2011.
Note: The Market Appreciation (40%) is not included in the updated Preliminary Cost Estimate

ATTACHMENT 5
FUEL ADJUSTMENT

Date 3/7/2011

P.I. Number **#0000519** County **Worth**

Project Number **STP00-0000-00(519)**

Special Provision, Section 109-Measurement and Payment

FUEL PRICE ADJUSTMENT *(ENGLISH 125% MAX)*

ENTER FPL DIESEL	2.986
ENTER FPM DIESEL	6.719

ENTER FPL UNLEADED	2.672
ENTER FPM UNLEADED	6.012

http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

INCREASE ADJUSTMENT
125.00%

INCREASE ADJUSTMENT
125.00%

ROADWAY ITEMS	QUANTITY	DIESEL FACTOR	GALLONS DIESEL	UNLEADED FACTOR	GALLONS UNLEADED	REMARKS
Excavations paid as specified by Sections 205 **(CUBIC YARD)**	136033.000	0.29	39449.57	0.15	20404.95	
Excavations paid as specified by Sections 206 **(CUBIC YARD)**		0.29		0.15		
GAB paid as specified by the ton under Section 310 **(TON)**	167189.000	0.29	48484.81	0.24	40125.36	
Hot Mix Asphalt paid as specified by the ton under Sections 400 **(TON)**		2.90		0.71		
Hot Mix Asphalt paid as specified by the ton under Sections 402 **(TON)**	107064.000	2.90	310485.60	0.71	76015.44	
PCC Pavement paid as specified by the square yard under Section 430 **(SY)**		0.25		0.20		

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
Bridge Excavation (CY) Section 211				8.00		1.50		
Class __Concrete (CY) Section 500				8.00		1.50		
Class __Concrete (CY) Section 500				8.00		1.50		
Class __Concrete (CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500				8.00		1.50		
Superstru Con Class__(CY) Section 500				8.00		1.50		
Concrete Handrail (LF) Section 500				8.00		1.50		
Concrete Barrier (LF) Section 500				8.00		1.50		

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
Stru Steel Plan Quantity (LB) Section 501				8.00		1.50		
Stru Steel Plan Quantity (LB) Section 501				8.00		1.50		
PSC Beams_____ (LF) Section 507				8.00		1.50		
PSC Beams_____ (LF) Section 507				8.00		1.50		
PSC Beams_____ (LF) Section 507				8.00		1.50		
Stru Reinf Plan Quantity(LB) Section 511				8.00		1.50		
Stru Reinf Plan Quantity(LB) Section 511				8.00		1.50		
Bar Reinf Steel (LB) Section 511				8.00		1.50		
Piling___inch (LF) Section 520				8.00		1.50		
Piling___inch (LF) Section 520				8.00		1.50		
Piling___inch (LF) Section 520				8.00		1.50		
Piling___inch (LF) Section 520				8.00		1.50		
Piling___inch (LF) Section 520				8.00		1.50		
Piling___inch (LF) Section 520				8.00		1.50		
Drilled Caisson,___ (LF) Section 524				8.00		1.50		
Drilled Caisson,___ (LF) Section 524				8.00		1.50		
Drilled Caisson,___ (LF) Section 524				8.00		1.50		
Pile Encasement,___(LF) Section 547				8.00		1.50		
Pile Encasement,___(LF) Section 547				8.00		1.50		

SUM QF DIESEL=	398419.98	SUM QF UNLEADED=	136545.75

DIESEL PRICE ADJUSTMENT($)	$1,368,134.37
UNLEADED PRICE ADJUSTMENT($)	$419,577.78

ASPHALT CEMENT PRICE ADJUSTMENT
(BITUMINOUS TACK COAT 125% MAX)

APPLICABLE TO CONTRACTS/PROJECTS CONTAINING THE 413 SPECIFICATION, SECTION 413.5.01 ADJUSTMENTS
ASPHALT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT

http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

ENTER APL 449 **ENTER APM** 1010.25

125.00%	INCREASE ADJUSTMENT

L.I.N.	TYPE	TACK (GALLONS)	TACK (TONS)	REMARKS
413-1000	PG 58-22	35467	152.3343	

TMT = 152.3343

PRICE ADJUSTMENT($)	$82,077.73

400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT 125% MAX

ENTER APL 449 **ENTER APM** 1010.25

http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

125.00%	INCREASE ADJUSTMENT

L.I.N. / Spec Number	MIX TYPE	HMA	JMF AC%	AC	REMARKS
402-3130	12.5 mm SP	26651	5.00	1332.55	
402-3121	25 mm SP	46168	5.00	2308.40	
402-3190	19 mm SP	34245	5.00	1712.25	
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			TMT =	5353.20	

PRICE ADJUSTMENT($)	$2,884,304.16

ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT(Surface Treatment 125% MAX)

APPLICABLE TO CONTRACTS CONTAINING THE 413 SPEC. SECTION 413.5.01 ADJUSTMENTS ASPHALT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT

http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

ENTER APL 449

ENTER APM 1010.25

125.00%	INCREASE ADJUSTMENT

Use this side for Asphalt Emulsion Only

L.I.N.	TYPE	ASPHALT EMULSION (GALLONS)

TMT =

REMARKS:

Use this side for Asphalt Cement Only

L.I.N.	TYPE	TACK (GALLONS)
413-1000	PG 58-22	

TMT =

REMARKS:

MONTHLY PRICE ADJUSTMENT($)	

ADJUSTMENT SUMMARY

FUEL PRICE ADJUSTMENT *(ENGLISH 125% MAX)*

DIESEL PRICE ADJUSTMENT($) $1,368,134.37

UNLEADED PRICE ADJUSTMENT($) $419,577.78

ASPHALT CEMENT PRICE ADJUSTMENT (BITUMINOUS TACK COAT 125% MAX) $82,077.73

400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT 125% MAX $2,884,304.16

ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT(Surface Treatment 125% MAX)

REMARKS:

TOTAL ADJUSTMENTS	$4,754,094.04

DWM 10/08

ATTACHMENT 6
ENVIRONMENTAL MITIGATION COST ESTIMATE

PRELIMINARY ENVIRONMENTAL MITIGATION COST ESTIMATE

Date:	February 1, 2011
Project:	SR 133 Widening
Project No.:	STP00-0000-00(519)
P.I. Number:	0000519
Project Termini:	2,000 feet north of the Colquitt/Worth County line to 1,500 feet north of SR 112 in Worth County
Project Description:	Widening of SR 133 from 2,000 feet north of the Colquitt/Worth County line to 1,500 feet north of SR 112 in Worth County

Mitigation cost assuming a Wetland Credit cost of $3,500 per credit and a Stream Credit cost of $45 per credit.

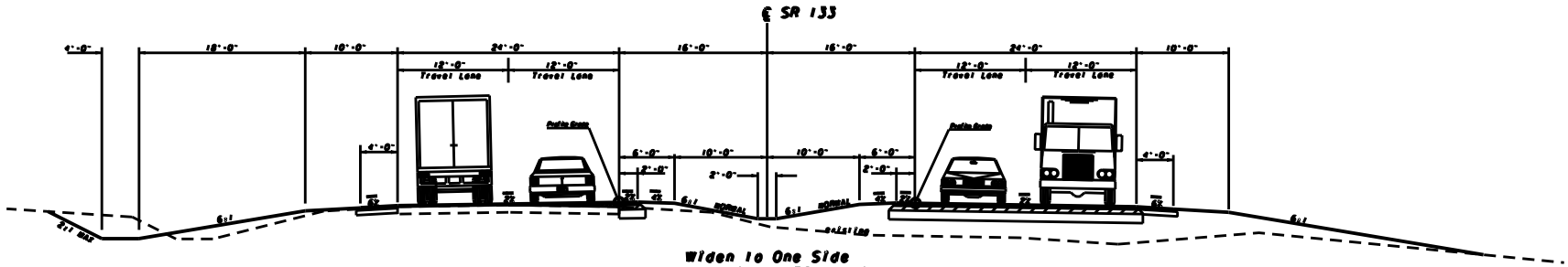
Project No.		**Required Stream Credits**	**Cost of Credit**	
STP00-0000-00(519)		4634.50	$45.00	**$208,552.50**
	Total Stream Credits	4634.50		
			Sub-Total	**$208,552.50**

Project No.		**Required Wetland Credits**	**Cost of Credit**	
STP00-0000-00(519)		68.52	$3,500.00	**$239,820.00**
	Total Wetland Credits	68.52		
			Sub-Total	**$239,820.00**
			Total	**$448,372.50**

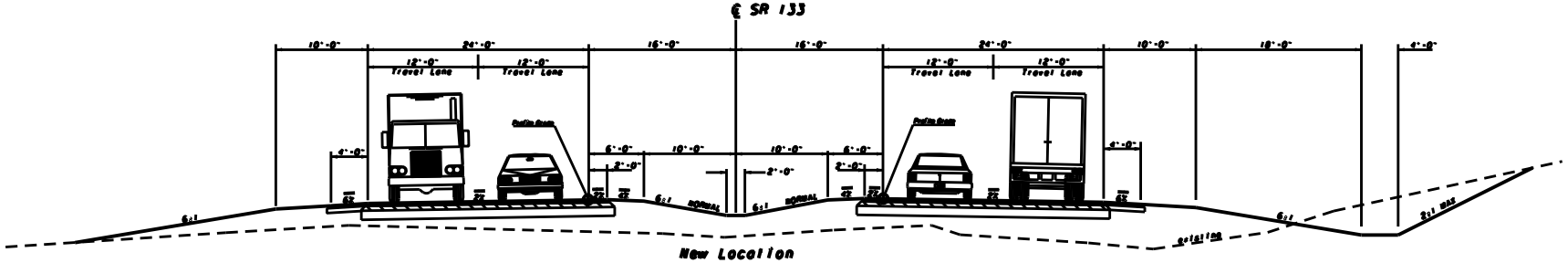
ATTACHMENT 7
TYPICAL SECTIONS

DATE:
USER:

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	STP00-0000-00(515)		



Widen to One Side
4 Lanes With a 32' Median
(D.S. 65mph)
NORMAL CROWN



New Location
4 Lanes With a 32' Median
(D.S. 65mph)
NORMAL CROWN

JBT J.B. TRIMBLE, INC.
2550 Heritage Court, SE,
Suite 250
Atlanta, GA 30339

REVISION DATES		

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:

TYPICAL SECTIONS

SR 133 (MOULTRIE ROAD)

DRAWING No. 5-01

ATTACHMENT 8
VALUE ENGINEERING IMPLEMENTATION LETTER

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: STP00-00(473)(475)(519)(520) **OFFICE:** Engineering Services
Colquitt Dougherty Worth
P.I. Nos.: 0000473/0000475/0000519/0000520
SR 133 Widening **DATE:** June 24, 2010

FROM: Ronald E. Wishon, State Project Review Engineer REW

TO: Bobby K. Hilliard, PE, State Program Delivery Engineer
Attn.: Douglas Fadool

SUBJECT: IMPLEMENTATION OF VALUE ENGINEERING STUDY ALTERNATIVES

The VE Study for the above projects was held January 19-22, 2010. Responses were received on June 24, 2010. Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. The Project Manager shall incorporate the VE alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT #	Description	Potential Savings/LCC	Implement	Comments
A-1	Reduce the amount of northerly shift in the SR 133 alignment to eliminate the need to grade separate SR 33while keeping the railroad grade separation	$1,838,000	No	This cannot be done because A-1.1 will be implemented.
A-1.1	Follow existing SR 133 alignment and construct new at-grade crossings in lieu of grade separations at SR 33 and the railroad	Proposed = $6,807,000 Actual = $6,787,000	Yes	This will be done. Redesign costs of $20,000 will reduce the proposed savings.
A-6	Reduce pavement thickness for the median left turn/U-turn lanes	Proposed = $4,755,000 Actual = $1,804,000	Yes, partially	OMR has approved a different pavement design than what was proposed by the VE Team. The new design will consist of 6.5"of asphalt over 10"of GAB. Full depth left turn lanes will be utilized at the SR 133 and South Mock Road intersection; all others will utilize the new pavement design. This results in a revised savings of $1,805,000 which will be reduced by $1,000 for redesign costs.

A-7	Use the minimum allowable lengths for the storage areas in the median left turn/U-turn lanes	Proposed = $1,600,000 Actual = $1,595,000	Yes, partially	There are 12 intersections where the total storage length will be reduced by 150 ft and 20 intersections where the total storage length will be reduced by 250 ft. Redesign costs of $5,000 will reduce the proposed savings.
A-8	Reduce the median width from 44 ft to 32 ft for the entire length of the project	Proposed = $878,000 Actual = $678,000	Yes	This will be done. Redesign costs of $200,000 will reduce the proposed savings.
A-9	Reduce the width of the paved outside shoulder from 6.5 ft to 4.0 ft	Proposed = $1,375,000 Actual = $1,372,500	Yes	This will be done. Redesign costs of $2,500 will reduce the proposed savings.
B-2	Reverse the girder direction (make perpendicular to the RR alignment) of the SR 133 bridge over the Georgia/Florida Railway	$418,000	No	This cannot be done because B-2.1 will be implemented.
B-2.1	Eliminate the SR 133 bridge over the Georgia/Florida Railway track and construct an at-grade crossing	Proposed = $3,565,000 Actual = $3,545,000	Yes	This will be done. Redesign costs of $20,000 will reduce the proposed savings.
B-8	Reduce the length of the SR 133 bridge over SR 33 by reducing the clear area from 26 ft to 14 ft	$529,000	No	This cannot be done because B-2.1 will be implemented.
D-1	Reduce all 6:1 sloped shoulder sections to 4:1 slopes throughout the entire project	$943,000	No	Increasing the slope increases the required clear zone which will increase the amount of excavation and required ROW. The additional ROW, excavation and redesign costs would cause an overall project increase of $1,900,000.
J-3	Substitute Type W guardrail for Type T guardrail throughout the entire project	$892,000	Yes	This will be done.

The Office of Engineering Services concurs with the Project Manager's responses.

Approved: _____ **Date:** 7/6/10
Gerald M. Ross, PE, Chief Engineer

REW/LLM
Attachments
c: Ben Buchan
Mike Haithcock/David Norwood/Douglas Fadool
Paul Liles/Bill Duvall/Bill Ingalsbe/Jenny Harris-Dunham
Alexis John
Joe Cowan/Sonja Thompson/Tony Cravey
Ken Werho
Lisa Myers
Matt Sanders

ATTACHMENT 9
APPROVED TRAFFIC DATA

Department of Transportation
State of Georgia

INTERDEPARTMENT CORRESPONDENCE

FILE STP00-0000-00(519), Worth County
P.I. # 0000519

OFFICE Planning

DATE February 14, 2011

FROM Cindy VanDyke, State Transportation Planning Administrator

TO Bobby K. Hilliard, P.E., State Program Delivery Design Engineer
Attention: Doug Fadool

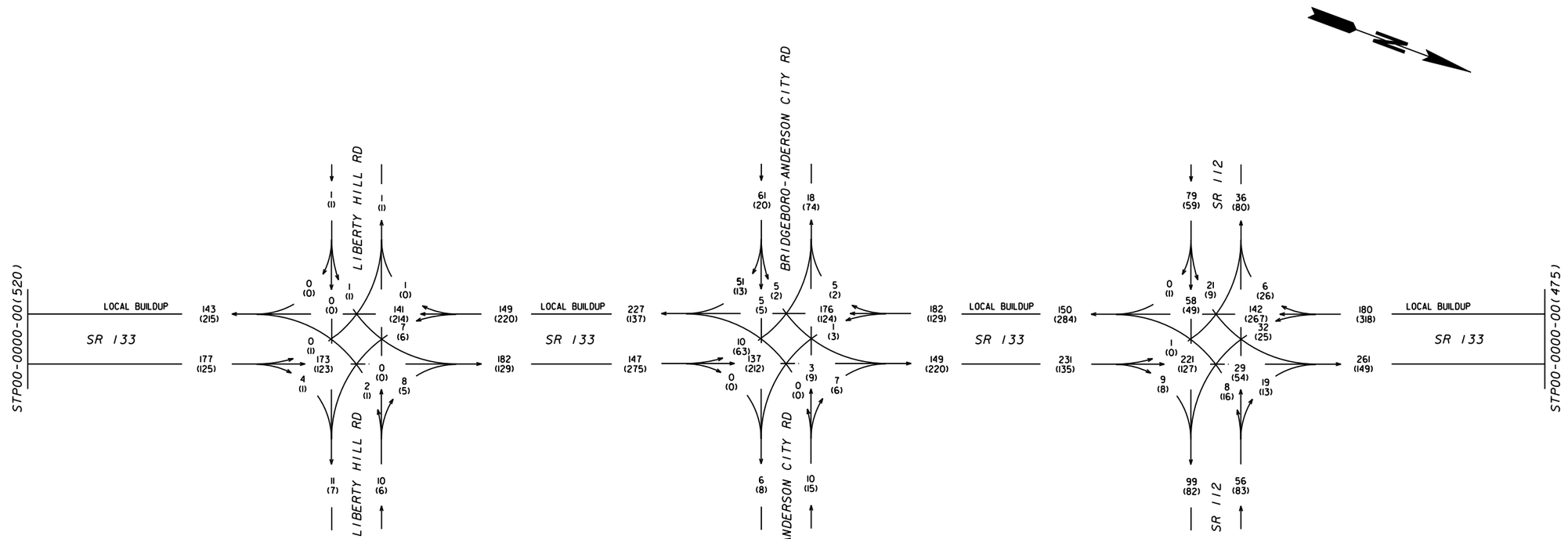
SUBJECT **Reviewed** Design Traffic for S.R. 133 from N of Colquitt County Line to N of S.R. 112.

As per your request, we reviewed the consultant's Design Traffic for the above project.

The Design Traffic is approved based on the information furnished. If you have any questions concerning this information please contact Abby Ebodaghe at (404) 631-1923.

CLV/AFE

DATETIME$$$	TIME$$$	PRF	DGN	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
$USER$		$$PENTABLE$$		WORTH	STP00-0000-00(519)		SH



DESIGN TRAFFIC
2010 AM DHV = 000
2010 PM DHV = (000)
T = 23% [AM], 34% [PM]
T(SU) = 11% [AM], 21% [PM]
T(MU) = 12% [AM], 13% [PM]

$$$$$$$DGNSPECIFICATION$$$$$$$
$$$$$$$STYTIME$$$$$$$
GPLM

DESIGNED BY	TRANSYSTEMS NO.
SKB	A31710011S
DRAWN BY	DATE
SKB	12/17/10
CHECKED BY	SCALE
BSW	N.T.S.

TranSystems
1780 Corporate Drive
Suite 400
Norcross, Georgia 30093
Tel 770.931.8005
Fax 770.931.8555
www.transystems.com

REVISION DATES		

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: CONSULTANT DESIGN

TRAFFIC DIAGRAM

SR 133 (P.I. #0000519)
WORTH COUNTY
2010 AM/PM DHV

DRAWING No. 10-01

DATETIME$$$	TIME$$$	PRF	DGN	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
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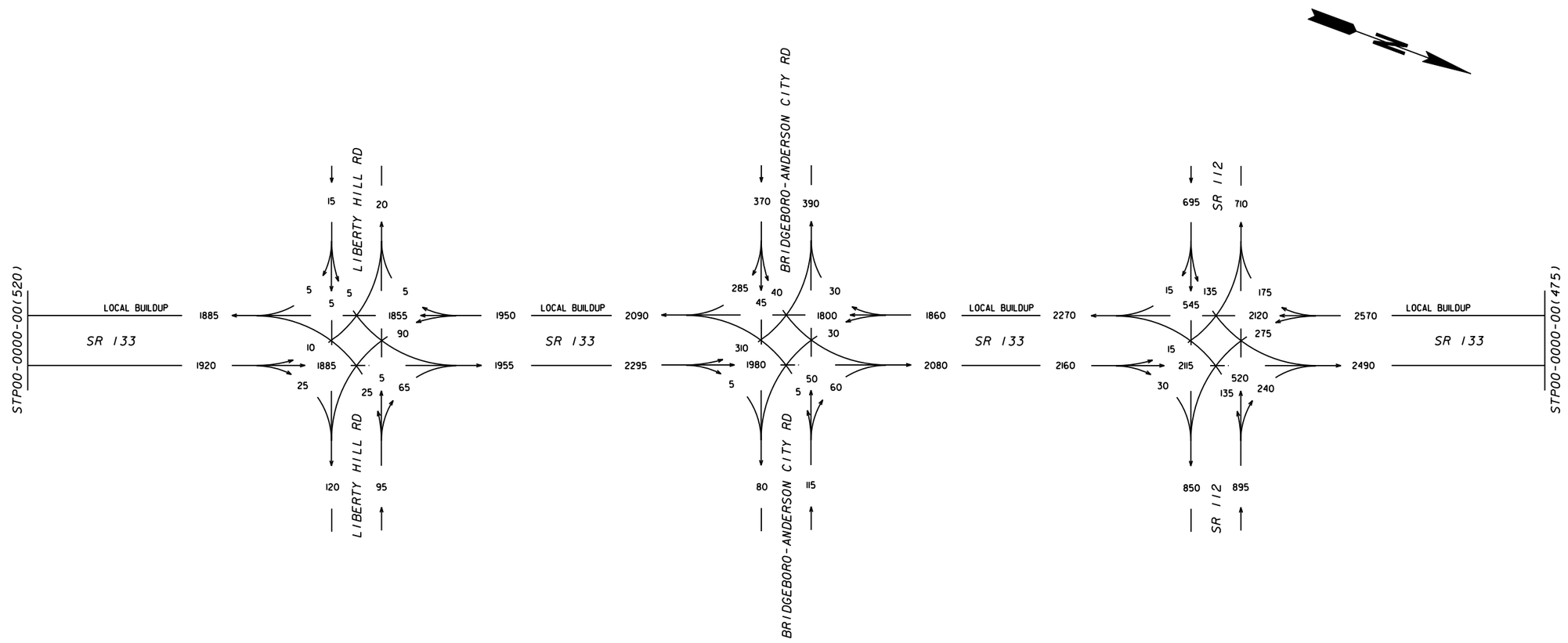

DESIGN TRAFFIC

2010 AADT = 000

24-HOUR T = 32%
24-HOUR T(SU) = 15%
24-HOUR T(MU) = 17%

DESIGNED BY	TRANSYSTEMS NO.
SKB	A31710015
DRAWN BY	DATE
SKB	12/17/10
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BSW	N.T.S.

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Suite 400
Norcross, Georgia 30093
Tel 770.931.8005
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REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

OFFICE: CONSULTANT DESIGN

TRAFFIC DIAGRAM

SR 133 (P.I.#0000519)

WORTH COUNTY
2010 AADT

DRAWING No. 10-02

$$$$$$DGNSPECIFICATION$$$$$$$

$$$$$$STYTIME$$$$$$

GPLM

DATETIME$$$	TIME$$$	PRF	DGN	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
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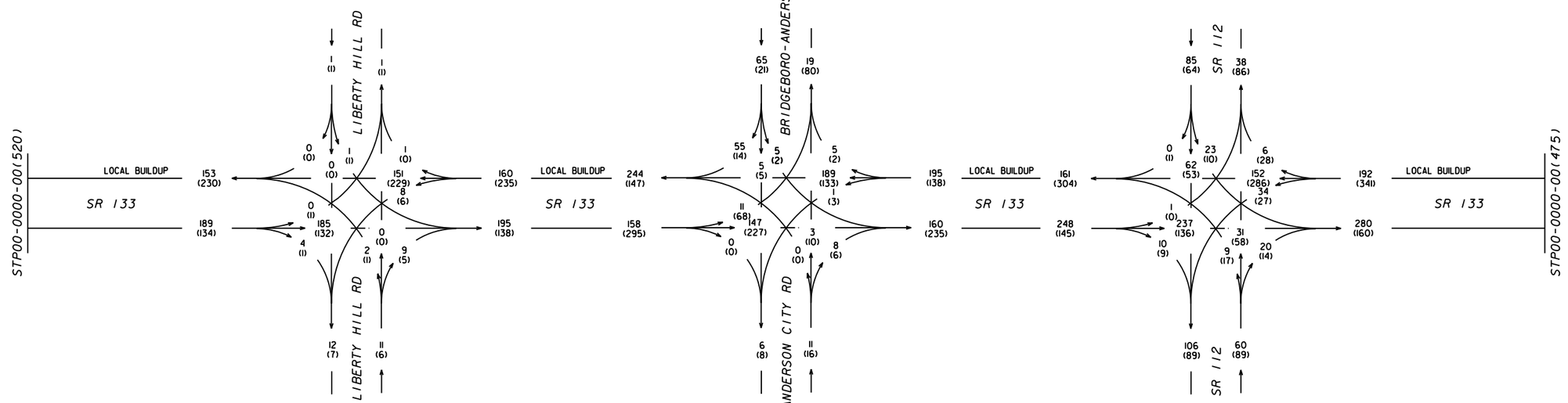

DESIGN TRAFFIC
2017 AM DHV = 000
2017 PM DHV = (000)
T = 23% [AM], 34% [PM]
T(SU) = 11% [AM], 21% [PM]
T(MU) = 12% [AM], 13% [PM]

DESIGNED BY	TRANSYSTEMS NO.
SKB	A31710015
DRAWN BY	DATE
SKB	12/17/10
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REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: CONSULTANT DESIGN

TRAFFIC DIAGRAM

SR 133 (P.I. #0000519)
WORTH COUNTY
2017 AM/PM DHV
NO BUILD

DRAWING No. 10-03

$$$$$$$DGNSPECIFICATION$$$$$$$
$$$$$$$STYTIME$$$$$$$
GPLM

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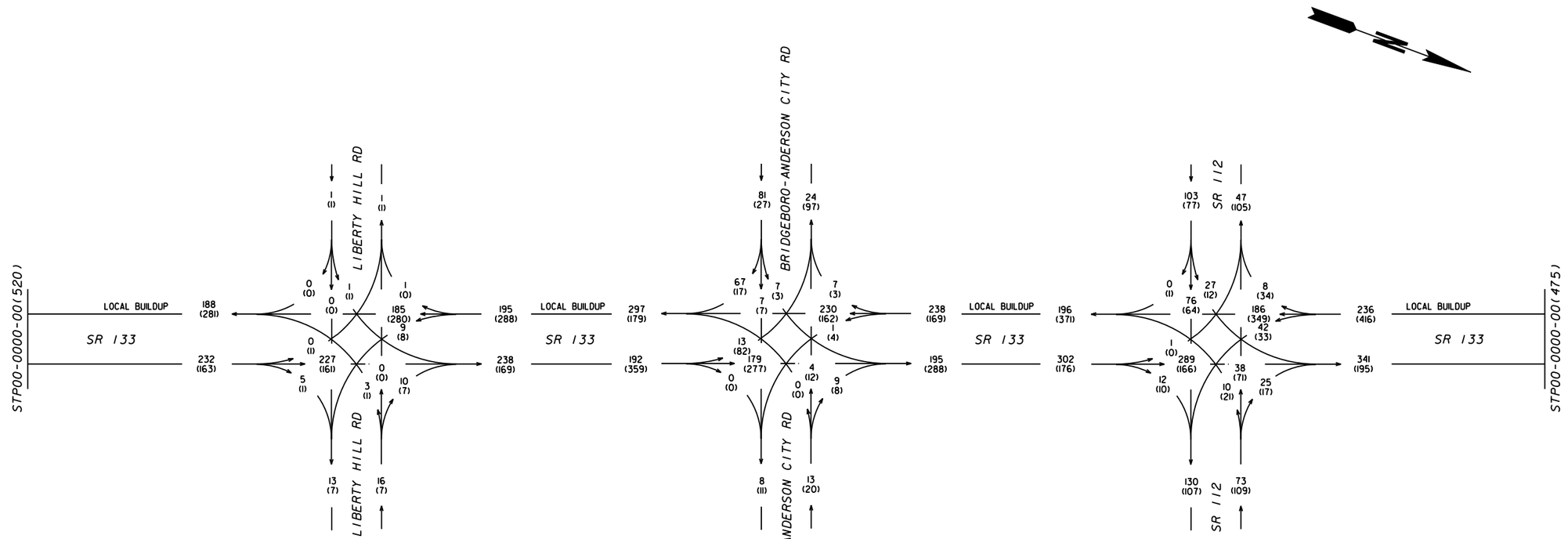

DESIGN TRAFFIC
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2037 PM DHV = (000)
T = 23% [AM], 34% [PM]
T(SU) = 11% [AM], 21% [PM]
T(MU) = 12% [AM], 13% [PM]

DESIGNED BY	TRANSYSTEMS NO.
SKB	A31710015
DRAWN BY	DATE
SKB	12/17/10
CHECKED BY	SCALE
BSW	N.T.S.

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REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: CONSULTANT DESIGN

TRAFFIC DIAGRAM

SR 133 (P.I. #0000519)
WORTH COUNTY
2037 AM/PM DHV
NO BUILD

DRAWING No. 10-04

$$$$$$$DGNSPECIFICATION$$$$$$$
$$$$$$$STYTIME$$$$$$$
GPLM

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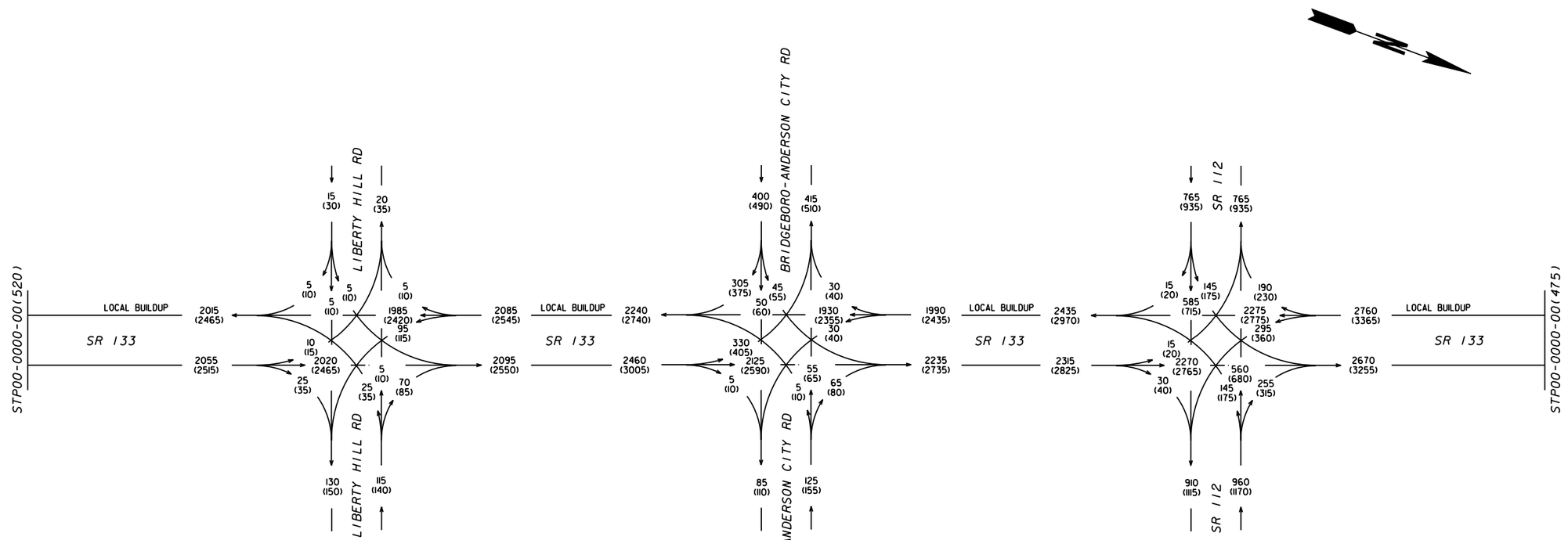

DESIGN TRAFFIC
2017 AADT = 000
2037 AADT = (000)
24-HOUR T = 32%
24-HOUR T(SU) = 15%
24-HOUR T(MU) = 17%

DESIGNED BY	TRANSYSTEMS NO.
SKB	A31710015
DRAWN BY	DATE
SKB	12/17/10
CHECKED BY	SCALE
BSW	N.T.S.

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STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: CONSULTANT DESIGN

TRAFFIC DIAGRAM

SR 133 (P.I. #0000519)
WORTH COUNTY
2017/2037 AADT
NO BUILD

DRAWING No. 10-05

GPLM $$$$$$DGNSPECIFICATION$$$$$$$
$$$$$$SITTIME$$$$$$

DATETIME$$$	TIME$$$	PRF	DGN	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
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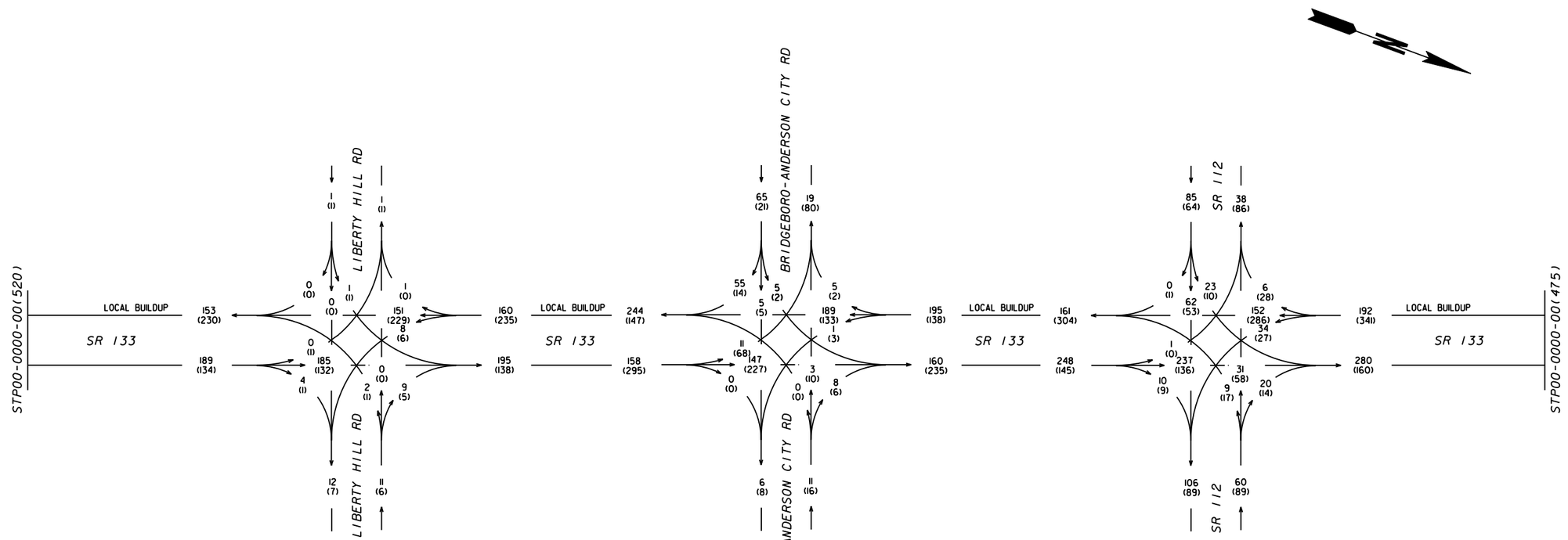

DESIGN TRAFFIC
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2017 PM DHV = (000)
T = 23% [AM], 34% [PM]
T(SU) = 11% [AM], 21% [PM]
T(MU) = 12% [AM], 13% [PM]

DESIGNED BY SKB	TRANSYSTEMS NO. A31710011S	
DRAWN BY SKB	DATE 12/17/10	
CHECKED BY BSW	SCALE N.T.S.	

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REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: CONSULTANT DESIGN

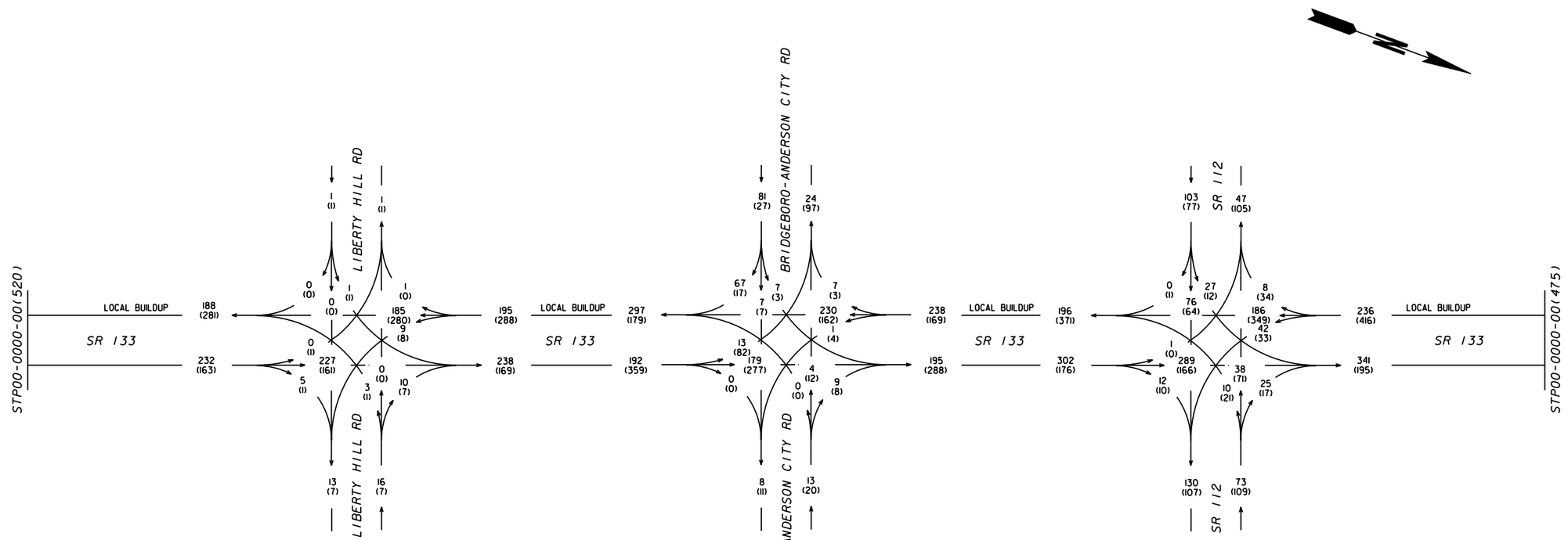
TRAFFIC DIAGRAM

SR 133 (P.I. #0000519)
WORTH COUNTY
2017 AM/PM DHV
BUILD

DRAWING No. 10-06

GPLM $$$$$$DGNSPECIFICATION$$$$$$$
$$$$$$SITTIME$$$$$$

DATETIME$$$	TIME$$$	PRF	DGN	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
$USER$		$$PENTABLE$$		WORTH	STP00-0000-00(519)		SH



DESIGN TRAFFIC
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2037 PM DHV = (000)
T = 23% [AM], 34% [PM]
T(SU) = 11% [AM], 21% [PM]
T(MU) = 12% [AM], 13% [PM]

DESIGNED BY	TRANSYSTEMS NO.
SKB	A31710015
DRAWN BY	DATE
SKB	12/17/10
CHECKED BY	SCALE
BSW	N.T.S.

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REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: CONSULTANT DESIGN

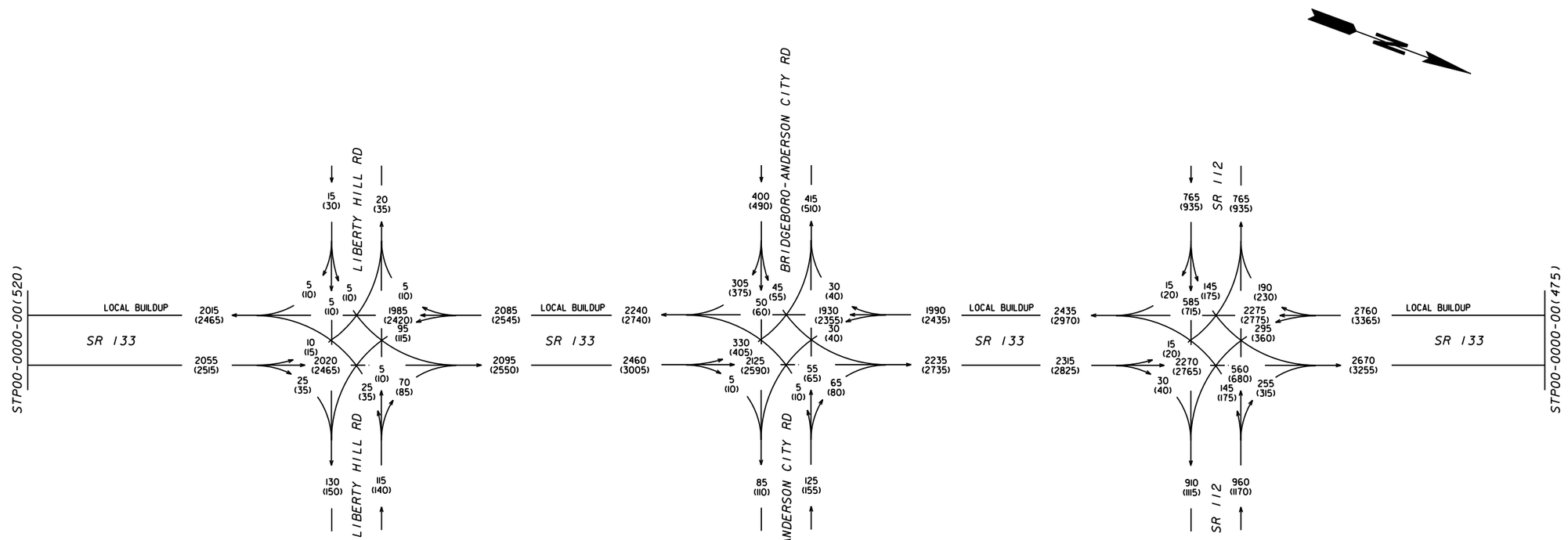
TRAFFIC DIAGRAM

SR 133 (P.I. #0000519)
WORTH COUNTY
2037 AM/PM DHV
BUILD

DRAWING No. 10-07

$$$$$$$DGNSPECIFICATION$$$$$$$
$$$$$$$SITTIME$$$$$$$
GPLM

DATETIME$$$	TIME$$$	PRF	DGN	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
$USER$		$$PENTABLE$$		WORTH	STP00-0000-00(519)		SH



DESIGN TRAFFIC
2017 AADT = 000
2037 AADT = (000)
24-HOUR T = 32%
24-HOUR T(SU) = 15%
24-HOUR T(MU) = 17%

DESIGNED BY	TRANSYSTEMS NO.
SKB	A31710011S
DRAWN BY	DATE
SKB	12/17/10
CHECKED BY	SCALE
BSW	N.T.S.

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REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: CONSULTANT DESIGN

TRAFFIC DIAGRAM

SR 133 (P.I. #0000519)
WORTH COUNTY
2017/2037 AADT
BUILD

DRAWING No. 10-08

$$$$$$DGNSPECIFICATION$$$$$$$
$$$$$$STYTIME$$$$$$
GPLM